

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

**FRANCIS HEMMING, C.M.G., C.B.E.**

Secretary to the Commission

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## **OPINION 432**

Rejection, as an unpublished proof, of the paper by Binney (W.G.) dated "9th December 1863" and entitled *Synopsis of the Species of Air-breathing Mollusks of North America* (confirmation of Ruling given in *Opinion 87*) and validation under the Plenary Powers of the generic name *Carinifex* Binney, 1865 (Class Gastropoda)

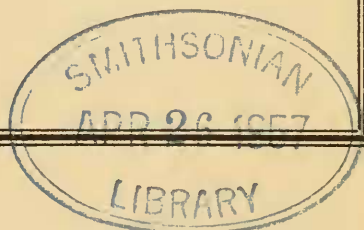
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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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(16th December 1954)

## OPINION 432

REJECTION, AS AN UNPUBLISHED PROOF, OF THE PAPER BY BINNEY (W.G.), DATED "9TH DECEMBER 1863" AND ENTITLED "SYNOPSIS OF THE SPECIES OF AIR-BREATHING MOLLUSKS OF NORTH AMERICA" (CONFIRMATION OF RULING GIVEN IN "OPINION" 87) AND VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "CARINIFEX" BINNEY, 1865 (CLASS GASTROPODA)

**RULING** :—(1) It is hereby ruled that the under-mentioned paper, having been distributed only as an unpublished proof does not satisfy the requirements of Article 25 of the *Règles* and therefore that no new name included in it acquired thereby the status of availability (confirmation of Ruling given in *Opinion* 87) :—

Binney (W.G.), *Synopsis of the species of Air-breathing Mollusks of North America*, dated 9th December 1863, a document printed on one side of the page and distributed as a proof of a projected and unnumbered part of the *Smithsonian miscellaneous Collections*, bearing the heading "Smithsonian Miscellaneous Collections 000".

(2) The title of the work specified in (1) above is hereby placed on the *Official Index of Rejected and Invalid Works in Zoological Nomenclature* with the Title No. 50.

(3) Under the Plenary Powers the generic name *Megasystropha* Lea, 1864, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(4) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1028 :—*Carinifex* Binney, 1865, as validated by the suppression under the Plenary Powers in (3) above of the generic name *Megasystropha* Lea, 1864 (gender : feminine) (type species, by selection by Fischer (P.) (1883) : *Planorbis newberryi* Lea, 1858) (Class Gastropoda).

(5) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 1048 :—*newberryi* Lea, 1858, as published in the combination *Planorbis newberryi* (specific name of type species of *Carinifex* Binney, 1865).

(6) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below :—

- (a) *Carinifex* Binney, 1863 (a name included in a work rejected under (1) above as not having been published for the purposes of Article 25 of the *Règles*) (Name No. 740) ;
- (b) *Megasystropha* Lea, 1864, as suppressed under the Plenary Powers under (3) above (Name No. 741) ;
- (c) *Carnifex* Keep, 1893 (an Erroneous Subsequent Spelling of *Carinifex* Binney, 1865) (Name No. 742) ;
- (d) *Megastropha* Walker, 1918 (an Erroneous Subsequent Spelling of *Megasystropha* Lea, 1864) (Name No. 743).

## I. THE STATEMENT OF THE CASE

On 6th February 1946 Dr. Joshua L. Baily, Jr. (*San Diego, California, U.S.A.*) addressed a letter to the Office of the

Commission requesting a Ruling on the relative status of the names *Carinifex* Binney, 1863, and *Megasystropha* Lea, 1864. As a result of correspondence between Dr. Baily and the Secretary to the Commission on the difficulties involved in this case the following revised application on the question of the generic name *Carinifex* Binney was submitted to the Commission by Dr. Baily in January 1953 :—

**Proposed use of the Plenary Powers to validate the generic name  
“ *Carinifex* ” Binney, 1865 (Class Gastropoda)**

By JOSHUA L. BAILY, Jr.

(*San Diego, California, U.S.A.*)

In the course of an investigation on which I am engaged, the old matter of the relative status of the names *Carinifex* Binney, 1863, and *Megasystropha* Lea, 1864 (Class Gastropoda, Order Pulmonata, Suborder Basommatophora), has come up again, and I accordingly appeal to the International Commission on Zoological Nomenclature for a decision which will finally settle this question in favour of the name *Carinifex* Binney.

2. This question was submitted by Dr. W. H. Dall to the International Commission some years ago, and the Commission's decision was given in *Opinion* 87. On re-reading that *Opinion*, I have, however, been led to the conclusion that not all the relevant data were before the Commission at the time when it gave the Ruling embodied in the foregoing *Opinion*. In any case that *Opinion* did not provide a definite answer on the question submitted of the availability of the generic name *Carinifex* Binney, by placing either that name or the name *Megasystropha* Lea on the *Official List of Generic Names in Zoology*.

3. The following is a list of the papers which are relevant to the present problem :—

- (1) In 1858 Lea published a paper (*Proc. Acad. nat. Sci. Philad.* 10 : 91) in which he gave a recognisable description of a species to which he applied the name *Planorbis newberryi*. The specimens on which the description of this species was based were taken at Klamath Lake and Canoe Creek, California.
- (2) In 1863 there appeared a pamphlet bearing the title “ Smithsonian Miscellaneous Collection 000 ” [i.e. issued without a number], which bore the date 9th December 1863. In this pamphlet

Binney, under the heading "Planorbinae", listed without comment the names of various species of *Planorbis* and *Segmentina*. At the same time Binney listed without comment what he called "*Carinifex newberryi* Lea".

- (3) In 1864 (*Proc. Acad. nat. Sci. Philad.* 16 : 5) Lea published a description of his *Planorbis newberryi* (in supplement to that which he had published in 1858); at the conclusion of this paper, he added under the heading "Remarks": "This is a very remarkable shell, and I have placed it among the *Planorbes*, until the soft parts may be observed in a living state; they may be found to differ from the true *Planorbes*". Further, he added in a footnote: "Provisionally it may be called *Megasystropha* . . . the umbilicus being large and vortex-like".
- (4) In February 1865 Binney published a paper (*Amer. J. Conch.* 1 : 50, pl. 7, figs. 6—7), which contained the first published figure of the species *Planorbis newberryi* Lea, 1858. In this paper Binney referred to this species as *Carinifex newberryi* (Lea).
- (5) In September 1865 Binney published a further paper ("Land and Freshwater Shells of North America") (*Smithson. misc. Coll.* 143 (Pt. 2) : 74—75), in which he defined the genus *Carinifex* and gave a figure of *Carinifex newberryi* (Lea) (fig. 120).
- (6) In 1867 Lea published a paper (*J. Acad. nat. Sci. Philad.* 6) in which he gave a figure (pl. 23, fig. 68) of the species to which in 1858 he had given the name *Planorbis newberryi* and which he now referred to under the name *Megasystropha newberryi*.

4. The discussion of the generic name *Carinifex* has centered around the question whether Binney's paper of 1863 can be regarded as having been duly published and whether the citation in that paper of the name "*Carinifex newberryi* Lea", without any supporting data is sufficient to identify the species to which Binney was referring. On both these questions an adverse view was taken by the Commission in *Opinion* 87. As regards the second of these questions it was pointed out in that *Opinion* that Lea had published other specific names comprising the trivial name, *newberryi*, e.g. *Ancylus newberryi*, *Goniobasis newberryi* and *Melania newberryi*, and the view was expressed that, as Binney did not cite either the name of the genus in which Lea had originally published the species to which he (Binney) was referring or a bibliographical reference to the place where that name was published, it was not possible to determine the identity of the species cited by Binney as "*Carinifex newberryi* Lea" and therefore that the generic name *Carinifex* acquired no availability in virtue of being so cited. Considering that the species with which we are here concerned was originally described by Lea as belonging to the genus *Planorbis* and that the name "*Carinifex newberryi* Lea" cited by Binney was placed

by that author under the heading "Planorbinae", the foregoing objection advanced against the identification of the species referred to by Binney does not stand any close examination. The other ground on which in *Opinion 87* the Commission rejected Binney's name *Carinifex*, namely that the document in which it appeared was a printers' proof appears to be open to question, for it was printed and distributed from the Smithsonian Institution in considerable numbers for comment by interested specialists, whereas a printers' proof is a document printed in only a very small number of copies, its sole purpose being to enable the author to make such corrections as are necessary before the book or paper concerned is actually published. It would, therefore, as it seems to me, have been more appropriate to examine the availability of Binney's book not from the standpoint of whether it existed only as a printers' proof (as was done in *Opinion 87*) but from the more general standpoint of whether it had been duly published within the meaning of Article 25. Admittedly, such an approach to the problem would have been difficult at the time when the Commission considered Dr. Dall's application in regard to the status of the name *Carinifex* Binney, for at that time there existed only the sketchiest definition of the criteria to be adopted in determining whether a given document should be regarded as having been "published" for the purposes of the Article referred to above. This was still the position when in 1946 I first submitted the present application to the Commission for decision. Since then, however, the position has been completely altered by the comprehensive definition of the expression "divulgué dans une publication" adopted by the Thirteenth International Congress of Zoology (on the recommendation of the International Commission on Zoological Nomenclature) at Paris in July 1948. Under that definition (1950, *Bull. Zool. Nomencl.* 4 : 215—221) it is evident that the paper by Binney in which the name *Carinifex* first appeared, did not satisfy the conditions provided in the *Règles* as criteria for publication at the time it was printed, but the question then arises as to whether it acquired status as a publication within the meaning of the *Règles* when these conditions were later complied with by the distribution of quantities of printed copies to dealers for resale to the public, and the public advertising of the availability of the documents in such a way as to secure universal circulation. The International Commission on Zoological Nomenclature has never rendered an opinion as to whether a printed sheet not intended as a publication can subsequently become one by fulfilment of the requirements set out in a definition of what constitutes publication; in the present instance we are not justified in concluding that the name *Carinifex* acquired no status in zoological nomenclature by virtue of having been included in that paper, but only that a reasonable doubt exists as to whether it may have done so.

5. Turning to Lea's paper of 1864, no one will deny that the method there adopted for publishing the new generic name *Megasystropha* deserves the strongest censure, for the conditional publication of names

in this way opens the door to serious abuses. Nevertheless, although there now exists in the *Règles a Recommandation* strongly deprecating the publication of names conditionally it is not prohibited (1950, *Bull. zool. Nomencl.* 4 : 144—145), though, since the addition to Article 25 of Proviso (c) (which requires that a statement of the distinguishing characters must be published in order to render available any name published after 31st December 1930), it has become impossible validly to publish a name in the manner adopted by Lea, when publishing the name *Megasystropha*. The name *Megasystropha* Lea, 1864, cannot therefore be ruled out of account ; it is true that Lea gave no characters for this genus but he did cite as belonging to it a species possessing a previously published specific name (*Planorbis newberryi* Lea, 1858). The name *Megasystropha* therefore was published with an “ indication ” as required by Proviso (a) to Article 25 (1950, *Bull. zool. Nomencl.* 4 : 78—80). Further, its type species is *Planorbis newberryi* Lea, 1858, by monotypy.

6. We come next to Binney's papers published in 1865, in each of which he used the generic name *Carinifex*. In the first of these papers—that published in February 1865 in the *American Journal of Conchology*—Binney, who in 1863 had made clear that, in his view, his Catalog of the North American Pulmonates printed by the Smithsonian Institution (discussed earlier in the present application) could not properly be regarded as having been then published, seems now to have changed his mind, for on this occasion he wrote : “ In the above catalog I proposed the generic name *Carinifex* for the species described as *Planorbis newberryi* Lea . . . Two species of this genus have been described, *C. newberryi* and *C. breweri*, Newcomb. The latter may prove to be a variety of the former ”. It is evident from these words that Binney did not look upon himself as then publishing the name *Carinifex* for the first time, but it is in fact from this paper that under the *Règles* the name *Carinifex* takes priority. It will be noted that Binney did not designate a type species for *Carinifex*, probably because he considered that as the result of his earlier (1863) action *Planorbis newberryi* Lea, 1858, was already the type species by monotypy.

7. Under a strict application of the *Règles* Binney was free to designate a type species either of the two nominal species which he assigned to *Carinifex* in the first of his two papers published in 1865, but since *Carinifex breweri* was a *species inquirenda* it must be excluded for consideration by any subsequent writer as type. Therefore the type species must be *Carinifex newberryi* Lea, and the only problem is to determine who first so designated it. Baker (1945, *The Molluscan family Planorbidae* : 154) lists ten designations of this species, but examination of the works in which the supposed designations were made indicated that most of them cited the species only as an example. The first author to state unequivocally that *Carinifex newberryi* was the type species of *Carinifex* was Paul Fischer (1883, *Man. de Conchyl.*



1 : 508). To be sure, Fischer did not state that he was designating a type species ; the implication is that he was citing a species which he believed had already been designated type species, and which under the rules is the only one that can serve as such and I can see no reason why Fischer's statement " Type : *C. newberryi* Lea " should not be accepted as a legitimate type designation.

8. In the light of the foregoing survey it appears that (1) under the *Règles* it is doubtful whether the generic name *Carinifex* in Binney's 1863 paper has any nomenclatorial status ; (2) that in 1864 Lea established validly (though in an objectionable manner) the generic name *Megasystropha* and that the type species of this genus by monotypy is *Planorbis newberryi* Lea, 1858 ; (3) that in 1865 Binney established the nominal genus *Carinifex* in conditions which satisfy the *Règles* and that this genus also has the above species as its type species (by subsequent selection) ; (4) that, in consequence of (2) and (3) above, the nominal genera *Megasystropha* Lea, 1864, and *Carinifex* Binney, 1865, are objectively identical with one another and the name *Carinifex* Binney is a junior objective synonym of *Megasystropha* Lea.

9. Passing now from the question of the legal position of these names under the *Règles* to the question of the nomenclatorial practice of workers in this field, we find almost unanimous agreement in favour of *Carinifex*. This name has been used in the following works :

- Fischer, P. 1883. *Manuel de Conchyliologie* 1 : 508  
 Tryon, G. W. 1884. *Structural and Systematic Conch.* 3 : 105  
 Clessin, S. 1886. " Die Familie der Limniaden ". *Syst Conch. Cab.*  
 Cooke, A. H. 1895. *Cambridge Natural History* 3 : 439  
 Walker, B. 1918. *Misc. Publ. Mus. Zool. Univ. Mich.*, No. 6 : 15, 106  
 Germain, L. 1923. *Rec. Ind. Mus.* 21 : 188  
 Wenz, W. 1923. *Fossil. Cat.*, pars 22 : 1671  
 Pilsbry, H. A. 1926. *Science* 64 : 248  
 Henderson, J. 1929. *Univ. Colo. Studies* 17(2) : 143  
 Chamberlin, R. V., and Jones, D. 1929. *Bull. Univ. Utah* 19(4) : 155  
 Thiele, J. 1931. *Handb. der Syst. Weichth.* 1(2) : 480.

Also, in an unpublished manuscript monograph of this genus by G. Dallas Hanna which I have had the privilege of examining, the name *Carinifex* is used, and H. B. Baker who kindly assisted me by consulting bibliographical references when I first submitted this application to the Commission, also prefers *Carinifex*. Four new species of the genus have been described in the present century, all under the name *Carinifex*;

not one of the specific names has ever been used in combination with the generic name *Megasystropha*. The only authors to use *Megasystropha* at all, so far as I have been able to learn are the following :—

Tryon, G. W., Jr. 1870. “ Continuation of Haldeman, Monograph of Fresh Water Gastropodes of the United States ” : 84

Dall, W. H., 1924, *Prof. Paper U.S. geol. Surv. No. 132(G)* : 112.

Of these, Tryon published an additional instalment of the same work later in the same year, in which he restored the name *Carinifex* (: 187, 214). Even Lea, the author of the name *Megasystropha*, ultimately abandoned it in favour of Binney's *Carinifex*.

10. For the sake of completeness a misspelling of each of these names should be noted here. Keep (*West Coast shells*, edition of 1893, : 116) used *Carnifex*, the same spelling being used in the index. Further, the pronunciation is indicated so that this seems to be an intentional emendation.

In addition, Walker (*Synopsis of the Classification of Fresh Water Mollusca of North America, North of Mexico, Univ. of Mich. Publ. No. 6*) uses the spelling *Megastropha* in the text, with the correct orthography in the index. This is clearly a typographical error. The name should be suppressed in such a way as to prevent its ever being used again, as there is a *Megastrophia* Carter 1939 (*Bull. Amer. Paleont.*, **24** : 137 (no. 83, 87)) and the similarity of these two is too close for comfort.

11. In view of the position which the name *Carinifex* has acquired for itself in the literature, its unquestioned use today and the fact that even in the past the name *Megasystropha* was only used on a few scattered occasions, it is clear that the interests of nomenclatorial stability would be promoted and unnecessary confusion avoided, if the Commission would now take such steps as are necessary to confer nomenclatorial availability upon the name *Carinifex* Binney. I accordingly ask the International Commission on Zoological Nomenclature :—

- (1) to use its Plenary Powers to suppress the generic names *Carinifex* Binney, 1863 and *Megasystropha* Lea, 1864, for the purposes of the Law of Priority ;
- (2) to place on the *Official List of Generic Names in Zoology* the name *Carinifex* Binney, 1865 (gender : feminine) (type species, by subsequent designations of P. Fischer, 1883 : *Planorbis newberryi* Lea, 1858) ;
- (3) to place on the *Official List of Specific Names in Zoology* the specific name *newberryi* Lea, 1858, as published in the combination *Planorbis newberryi* ;

(4) to place on the *Official Index of Rejected and Invalid Generic Names in Zoology* the following :—

- Carinifex* Binney, 1863
- Megasystropha* Lea, 1864
- Carnifex* Keep, 1893
- Megastropha* Walker, 1918.

## II. THE SUBSEQUENT HISTORY OF THE CASE

**2. Registration of the present application :** Upon the receipt of Dr. Baily's application the question of the use by the International Commission of its Plenary Powers to validate the generic name *Carinifex* Binney, 1865, was allotted the Registered Number Z.N.(S.) 224.

**3. Alternative proposal submitted by the Secretary to the Commission :** Mr. Hemming, as Secretary, took the view that in one respect the procedure proposed in Dr. Baily's application was open to objection, for in the concluding paragraph of his application he asked the International Commission to use its Plenary Powers to suppress the name *Carinifex* Binney, 1863, thereby implicitly, though not explicitly, asking it to take the stand that it had been in error when in *Opinion 78* it had dealt—in an admittedly elusive manner—with the status under Article 25 of the paper by Binney which was distributed in 1863 as a proof of a prospective paper in the *Smithsonian Miscellaneous Collections* (see paragraph 3(2) of Dr. Baily's application). Mr. Hemming considered that the foregoing request in relation to the generic name *Carinifex* Binney, 1863, would have been perfectly in order if Dr. Baily had joined to it a request either that the Commission should direct that *Opinion 78* was not to be taken as constituting a rejection of Binney's paper or if he had asked the Commission to validate that paper under its Plenary Powers. In the circumstances Mr. Hemming submitted for the

consideration of the Commission the following alternative proposal which avoided the difficulties discussed above, while at the same time meeting entirely the desire of Dr. Baily that the name *Carinifex* should be validated as from the paper by Binney entitled "Land and Freshwater Shells of North America" published in September 1865 in No. 143 (Pt. 2) of the *Smithsonian Miscellaneous Collections* :—

**Comment on Dr. Joshua L. Baily Jr.'s proposal for the validation of the generic name "Carinifex" Binney, 1865 (Class Gastropoda) and an alternative proposal**

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

Dr. Joshua L. Baily, Jr., has shown in his application that the generic name *Carinifex* Binney, either as of 1863 or as of 1865, has been widely used in the literature, while its older and valid rival *Megasystropha* Lea, 1864, was not only published in a most unsatisfactory manner, but, in addition, has hardly been used at all.

2. Dr. Baily has therefore, I consider, established a strong case for the use of the Plenary Powers for the purpose of validating the name *Carinifex* Binney. There is, however, one passage in his paper upon which I feel bound to comment. This is where he seeks to establish the proposition that the Commission was in error when in 1925 in its *Opinion 87* (*Smithson. misc. Coll.* 73 (No. 3) : 21—22) it rejected as not having been duly published for the purposes of Article 25 a paper by Binney, as distributed in 1863 in proof as a projected part of the *Smithsonian miscellaneous Collections*. Further, at the end of his paper Dr. Baily asks the International Commission to use its Plenary Powers for the purpose, *inter alia*, of suppressing the name *Carinifex* Binney, 1863, i.e. for suppressing this name as it appeared in the proof sheet dealt with in *Opinion 87*. While it is easy to criticise the oblique manner in which the Ruling given in *Opinion 87* was phrased and not difficult also to find defects in some of the arguments used incidentally in the discussion of that case, this, I suggest, is today of no more than historical interest. Equally, it is, I feel, beside the point at this date to traverse again the wisdom of the adverse view taken by the Commission as to the availability of the proof of 1863, though, having regard to the fact (1) that the document in question was issued as an unnumbered proof and (2) that in the preface to this document Professor Henry expressly referred to it as "a mere proof", it is difficult to see how the Commission, when judging this document against the provisions of Article 25, could possibly have taken any view other than that which it did.

3. The only point which arises today is, as it seems to me, whether there are any grounds which would justify the Commission at this time in reversing—or even in re-opening—the decision which it took in this matter nearly thirty years ago, a decision against which no murmur of dissent has till now ever reached the Office of the Commission. My view is that the Commission would be most ill-advised to take any such action. Moreover, as Secretary to the Commission, I take the view that it is irrelevant and inappropriate to raise such an issue incidentally in a case dealing with an individual name. My recommendation is that the Commission should (1) dispose of the general question by placing the Binney proof of 1863 forthwith on the *Official Index of Rejected and Invalid Works in Zoological Nomenclature*, which, as will be recalled, was expressly established by the Fourteenth International Congress of Zoology, Copenhagen, 1953, for the purpose of placing on record in the most formal manner Rulings given by the Commission in *Opinions* either suppressing given books under its Plenary Powers or rejecting given books as invalid under the *Règles* (1953, *Copenhagen Decisions zool. Nomencl.* : 23—24, Decision 23), and (2) deal on its merits with the particular case of the name *Carinifex* Binney, 1865, in the light of (1) above.

4. I accordingly submit for the consideration of the International Commission the following proposal as an alternative to that submitted by Dr. Baily, namely that the Commission should :—

(1) place the under-mentioned work on the *Official Index of Rejected and Invalid Works in Zoological Nomenclature* :—

Binney (W.G.), *Synopsis of the species of Air-breathing Mollusks of North America*, dated 9th December 1863, a document printed on one side of the page and distributed as a proof of a projected and unnumbered part of the *Smithsonian miscellaneous Collections*, bearing the heading “ Smithsonian Miscellaneous Collections 000 ” (codification of Ruling given in *Opinion* 87) ;

(2) use its Plenary Powers for the purpose of suppressing the generic name *Megasystropha* Lea, 1864, for the purposes of the Law of Priority but not for those of the Law of Homonymy ;

(3) place the under-mentioned generic name on the *Official List of Generic Names in Zoology* : *Carinifex* Binney, 1865 (gender : feminine) (type species, by selection by Fischer (P.), (1883) : *Planorbis newberryi* Lea, 1858) ;

(4) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *newberryi* Lea, 1858, as published in the combination *Planorbis newberryi* (specific name of type species of *Carinifex* Binney, 1865) ;

- (5) place the under-mentioned invalid generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) *Carinifex* Binney, 1863 (a name included in a work rejected under (1) above as not having been published for the purposes of Article 25 of the *Règles*) ;
  - (b) *Megasystropha* Lea, 1864, as suppressed under the Plenary Powers under (2) above ;
  - (c) *Carnifex* Keep, 1893 (an Invalid Subsequent Spelling of *Carinifex* Binney, 1865) ;
  - (d) *Megastropha* Walker, 1918 (an Invalid Subsequent Spelling of *Megasystropha* Lea, 1864).

5. *Postscript* : Dr. Baily has informed me (*in litt.*, 13th October 1954) that the generic name *Carinifex* has not been taken as the basis for a family-group name. Accordingly, no question arises of placing such a name on the *Official List of Family-Group Names in Zoology*.

**4. Publication of the present application :** The present application, together with Mr. Hemming's alternative proposal, was sent to the printer on 13th October 1954 and both documents were published on 30th December in the same year in Part 11 of Volume 9 of the *Bulletin of Zoological Nomenclature* (Baily, 1954, *Bull. zool. Nomencl.* **19** : 321—326 ; Hemming, *ibid.* **9** : 326—328).

**5. Issue of Public Notices :** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 30th December 1954 (a) in Part 11 of Volume 9 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Baily's application and Mr. Hemming's alternative application were published) and (b) to the other prescribed serial publications. In addition, such notice was given also to certain general zoological serial publications and to two conchological serials.

**6. Comments received in regard to the present case :** The publication of the papers by Dr. Baily and by Mr. Hemming, together with the issue of the accompanying Public Notices elicited comments from seven specialists (U.S.A., six specialists ;

United Kingdom, one). Of these specialists one only (Professor Horace B. Baker) commented on the alternative procedures suggested in the present case. The comments so received are reproduced in the immediately following paragraphs.

**7. Support received from Horace B. Baker (Zoological Laboratory, University of Pennsylvania, Philadelphia, U.S.A.):** On 3rd March 1955 Professor Horace B. Baker (*Zoological Laboratory University of Pennsylvania, Philadelphia, U.S.A.*) addressed to the Office of the Commission the following letter in support of the present application (Baker, 1955, *Bull. zool. Nomencl.* **11** : 272):—

Dr. Baily's "Proposed use of the Plenary Powers to validate the generic name '*Carinifex*' Binney, 1865 (Class Gastropoda)", (1954 *Bull. zool. Nomencl.* **9**(11) : 321—326), is backed strongly by me. Everybody in the United States, so far as I know, used *Carinifex* anyway. Although we agree with your defense of *Opinion 87* in principle, we also know that W. G. Binney's check-list (1863) although in the form of "proof-sheets", actually had a wide general distribution (i.e., it was published). Apparently, anyone could have obtained it and many did; at various times since 1910, I have picked up 3 second-hand copies. However, except for *Carinifex*, your proposal to invalidate it would be acceptable.

**8. Support received from Sir Philip Manson-Bahr (London):** On 9th March 1955 Sir Philip Manson-Bahr (*London*) addressed the following letter to the Commission in support of Dr. Baily's application :—

For some time past I have been in communication with Dr. Joshua Baily, Jr., of San Diego upon the nomenclature of certain snails. I cannot in any way claim to be a malacologist, but I am deeply interested in these freshwater molluscs which act as intermediary hosts for human parasites. Thus, as I edit the text book *Tropical Diseases* I am deeply perturbed with the changes in nomenclature in the genera *Planorbis* and *Bullinus*.

It is really becoming so confusing that the teaching of this subject has become seriously embarrassed.

Dr. Baily is at present concerned with the nomenclature of *Carinifex* which belongs to the PLANORBIDAE and is a potential carrier of

Schistosomiasis in Man. That means to say it could be infected if the human disease was introduced into California. Cram and colleagues (1945, *Science*, 23 : 302) have already shown that *Tropicorbis havanensis* and *Depanotrema cultratus*, widely distributed in Louisiana, Texas and Cuba, are good laboratory hosts of this parasite and could easily become very dangerous were this human parasite introduced.

**9. Support received from Rawson J. Pickard (Clinical Laboratory, San Diego, California, U.S.A.) :** On 11th March 1955 Dr. Rawson J. Pickard (*Clinical Laboratory, San Diego, California, U.S.A.*) addressed the following letter of support to the Office of the Commission :—

Dr. Joshua Baily has let me read his paper on a proposed name for *Carinifex* Binney, 1865, published in the *Bulletin of Zoological Nomenclature*. He mentioned to me the possibility of this snail becoming host to parasites of humans, and standardisation of nomenclature helpful to researchers ; who, in any scientific (biological sciences) now must research first in the long list of “ nyms ” epo (may be ano) nyms before going to work.

Brumpt gives a considerable list of Planorbis species that are host to human parasites. In Minnesota and that region there is now a species host to a parasite so far causing only “ swimmers’ itch ” the parasite dying in the skin. What a happy thought that a new disease may appear with a visible cause instead of the many new viruses (i.e. guessed diagnoses).

I trust that you are on the side of simplification.

**10. Support received from W. McBlair (San Diego State College, San Diego, California, U.S.A.) :** On 13th April 1955 Professor W. McBlair (*San Diego State College, San Diego, California, U.S.A.*) addressed the following letter of support to the Office of the Commission :—

May I use this letter to support the use of the generic term *Carinifex* instead of *Megasystropha* in the *Official List of Generic Names in Zoology* ?

**11. Support received from Robert D. Harwood (San Diego State College, San Diego, California, U.S.A.) :** On 15th April 1955 Professor Robert D. Harwood (*San Diego State College,*



*San Diego, California, U.S.A.*) addressed the following letter of support to the Office of the Commission :—

I wish to add my note of approval for the recommendation of Dr. Joshua L. Baily regarding the validation of generic name *Carinifex* (Class Gastropoda). I have great respect for the opinion of Dr. Baily and also feel that to instate a name of questionable seniority would be a mistake.

**12. Support received from E. P. Chace and Elsie M. Chace (Natural History Museum, San Diego, California, U.S.A.) :** On 10th May 1955 Elsie M. Chace and E. P. Chace (both of the *Natural History Museum, San Diego, California, U.S.A.*) jointly addressed a letter to the Office of the Commission on a number of cases which included the present case. The relevant extract of this letter is as follows :—

It seems to us that Dr. Baily's position is well taken. That the formal validation of *Carinifex* Binney, 1865, as a generic name and the specific name *newberryi* Lea, 1858, as published in the binominal combination *Planorbis newberryi*, will add to nomenclatorial stability and help to avoid confusion.

**13. No objection received :** No objection to the action proposed in this case was received from any source.

### III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

**14. Issue of Voting Paper V.P.(55)10 :** On 5th August 1955, a Voting Paper (V.P.(55)10) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Carinifex* Binney, 1865, and associated matters as set out in paragraph 4 on pp. 327—328 of Volume 9 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph so numbered in the application reproduced in the first paragraph of the present *Opinion*].

**15. The Prescribed Voting Period :** As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 5th November 1955.

**16. Particulars of the Voting on Voting Paper V.P.(55)10 :** At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(55)10 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received) :*

Bodenheimer ; Holthuis ; Riley ; Vokes ; Stoll ;  
Hering ; Bradley (J.C.) ; Lemche ; Prantl ; Hankó ;  
Mayr ; do Amaral ; Esaki ; Kühnelt ; Dymond ;  
Key ; Mertens ; Bonnet ; Hemming ; Jaczewski ;  
Miller ; Sylvester-Bradley ; Cabrera ;

(b) *Negative Votes :*

None ;

(c) *Voting Papers not returned, two (2) :*

Boschma<sup>1</sup> ; Tortonese.<sup>1</sup>

**17. Declaration of Result of Vote :** On 6th November 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(55)10, signed a Certificate that the Votes cast were as set out in paragraph 16 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

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<sup>1</sup> After the close of the Prescribed Voting Period affirmative votes were received from Commissioner Boschma and from Commissioner Tortonese.

**18. Preparation of the Ruling given in the present "Opinion" :** On 18th May 1956, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(55)10.

**19. Original References :** The following are the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

*Carinifex* Binney (W.G.), [1863], *Syn. Spec. Air-breathing Moll. N. Amer.* : [11]

*Carinifex* Binney (W.G.), 1865, *Smithson. misc. Coll.* **143** (Pt. 2) : 74—75

*Carnifex* Keep, 1893, *West Coast Shells* (ed. of 1893) : 116

*Megastropha* Walker, 1918, *Univ. Michigan Publ.* No. **6** : 106, 207

*Megasystropha* Lea, 1864, *Proc. Acad. nat. Sci. Philad.* **16** : 5

*newberryi*, *Planorbis*, Lea, 1858, *Proc. Acad. nat. Sci. Philad.* **10** : 91

**20.** The following is the reference for the selection of the type species for the genus *Carinifex* Binney, 1865, specified in the Ruling given in the present *Opinion* : Fischer (P.), 1883, *Man. Conchyliol.* **1** : 508.

**21. Family-Group-Name Aspect :** The applicant has reported that the generic name *Carinifex* Binney has not been taken as the basis for a family-group name.

**22.** The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is

accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

23. The present *Opinion* shall be known as *Opinion* Four Hundred and Thirty-Two (432) of the International Commission on Zoological Nomenclature.

DONE in London, this Eighteenth day of May, Nineteen Hundred and Fifty-Six.

*Secretary to the International Commission  
on Zoological Nomenclature*

**FRANCIS HEMMING**